

Purple Mash Computing Scheme of Work: Knowledge Organisers

## Unit: 1.7 Coding

#### **Key Learning**

- To understand what instructions are and predict what might happen when they are followed.
- To use code to make a computer program.
- To understand what object and actions are.
- To understand what an event is.
- To use an event to control an object.
- To begin to understand how code executes when a program is run.
- To understand what backgrounds and objects are.
- To plan and make a computer program.



#### Action

Types of commands which are run on an object. They could be used to move an object or change a property.

#### Algorithm

A precise step by step set of instructions used to solve a problem or achieve an objective.

#### Background

The part of the program design that shows behind everything else. It sets the scene for the story or game. **Key Vocabulary** 

Character A type of object in 2Code that can be programmed to change actions or properties.

#### **Code Design**

Design what your program will look like and what it will do. Coder - A person who writes computer code.

#### Coding

Writing instructions that can be interpreted by a computer to create a program. **Command** A single instruction in a computer program.

#### **Design Mode**

Used to create the look of a 2Code computer program when it is run.

#### Debugging

Finding a problem in the code and fixing it.

#### Event

Something that causes a block of code to be run.





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Key Vocabulary

#### Input

Information going into the computer. Can include moving or clicking the mouse, using the keyboard, swiping and tilting the device.

**Object** An element in a computer program that can be changed using actions or properties.

#### Output

Information that comes out of the computer e.g. sound. Program In 2Code, this is several commands that run purposefully together.

#### **Properties**

All objects have properties that can be changed in design or by writing code e.g. image, colour and scale properties.

#### Scale

The size of an object in 2Code.

### Stop command

A command that stops a character moving.

### **Key Questions**

# Why is it useful to design before coding?

It helps you to get a clear idea of what you want your program to do. You can use the design to decide which objects you need to add, what to call them and what actions they should perform.

#### Sound

This is a type of output command that makes a noise.

#### Scene

The background and objects together create a scene.

#### When clicked

An event command. It makes code run when you click on something (or press your inger on a touchscreen).

#### How can you make characters move in a 2Code program?

In design mode, add a character. Change properties such as the name and scale. Exit from design mode and drag your character's code block into the coding window. From the properties menu, select right, left, up or down.



### What is coding?

Writing instructions in a way that a computer can interpret them to make a program.

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		?	Hint
Open, close or share a file	Save your work	Watch the instruction video	Get a hint when you are stuck in 2Code
Design	Exit Design		when clicked
Open design mode s in 2Code	Switch to code mode in 2Code	The background object	A 'when clicked' code block
<b>right</b>	sound		
An object property	Sound output block		

